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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,398	09/30/2003	Si-Hyun Song	8734.239.00 US	3749
30827	7590	11/28/2006		
MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006				
EXAMINER ADAMS, GREGORY W				
ART UNIT		PAPER NUMBER		
3652				

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/673,398	Applicant(s) SONG, SI-HYUN	
	Examiner Gregory W. Adams	Art Unit 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 2002-0061912.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/14/06</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Continued Examination

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 17, 2006 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1, 3-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Babbs (US 5,823,361) in view of Betsuyaku (US 6,006,919).

With respect to claims 1, 3, 7-13, 14-19, Babbs discloses a frame, support members 126 protruding from opposing sides, and two support bars 125 connecting two support members 126 configured to distributed a load across a substrate. Babbs does not disclose rectangular supporting bars connecting two support members. Betsuyaku discloses a liquid crystal display panel cassette including rectangular supporting bars (FIG. 4: 3) that per international agreement improves "durability, sealing performance, good anti-staining performance, unmanned use, automation, ease of cleaning, etc." C1/L28. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Babbs to include rectangular supporting bars as per the teachings of Betsuyaku, to improve LCD cassette performance.

With respect to claims 4-6, 20, Babbs discloses a frame, support members 126 protruding from opposing sides, and two support bars 125 connecting two support members 126 configured to distributed a load across a substrate, and does not explicitly disclose supporting liquid crystal display panels including thin film arrays and color filters but Babbs discloses supporting large glass substrates by using support members connected by support bars to minimize sag. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use Babbs' cassette to store liquid crystal display panels comprising thin transistor arrays and color filters as Babbs discloses the apparatus which could function to support large objects. Babbs does not disclose rectangular supporting bars connecting two support members. Betsuyaku discloses a liquid crystal display panel cassette including rectangular

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supporting bars (FIG. 4: 3) that per international agreement improves "durability, sealing performance, good anti-staining performance, unmanned use, automation, ease of cleaning, etc." C1/L28. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Babbs to include rectangular supporting bars as per the teachings of Betsuyaku, to improve LCD cassette performance.

Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Babbs (US 5,823,361) in view Stadler et al. (US 5,236,548) (previously cited). Babbs discloses a frame, support members 126 protruding from opposing sides, and two support bars 125 connecting two support members 126. Babbs does not disclose acetal resin. Referring to FIGS. 1-2 Stadler et al. disclose support bars 8 of acetal resin which is resistant to cleaning agents and etchants and that do not contaminate substrate. Col. 5, lns. 39-46. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Babbs' supports to include acetal resin, as per the teachings of Stadler et al., such that supports resist cleaning agents and etchants and will not contaminate substrates.

Response to Arguments

Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory W. Adams whose telephone number is (571) 272-8101. The examiner can normally be reached on M-Th., 8:00-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GWA



EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600